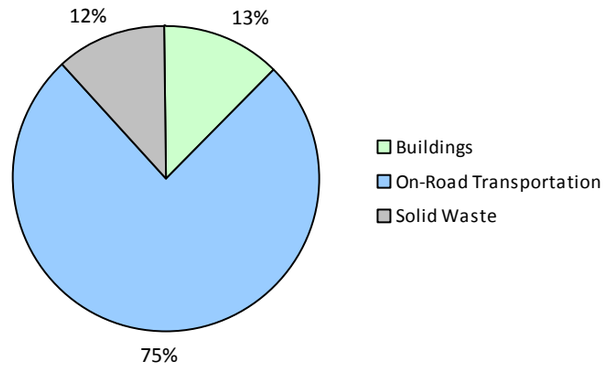
Valemount Village

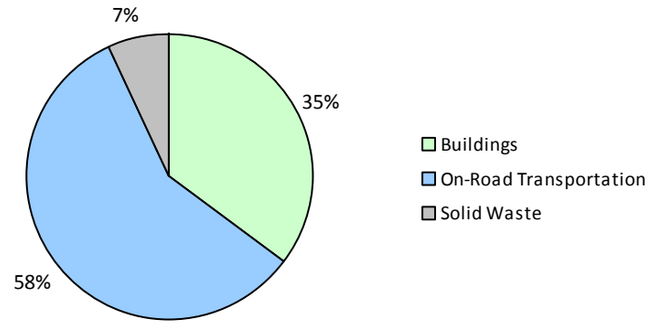
2010 Community Energy and Emissions Inventory

Monitoring and reporting on progress towards greenhouse gas emissions reduction targets

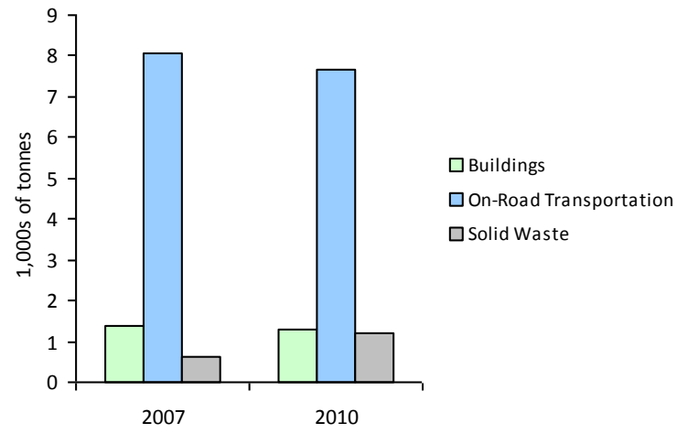
2010 GHG Emissions Sources (Total for this Community)



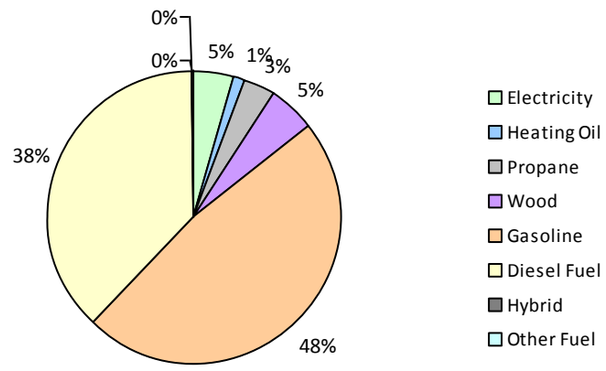
2010 GHG Emissions Sources (Total for BC)



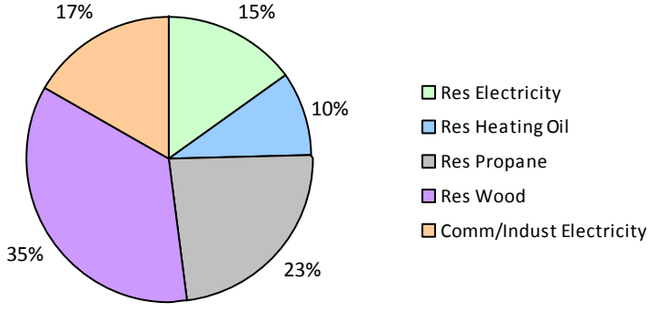
GHG Emissions Comparisons for this Community



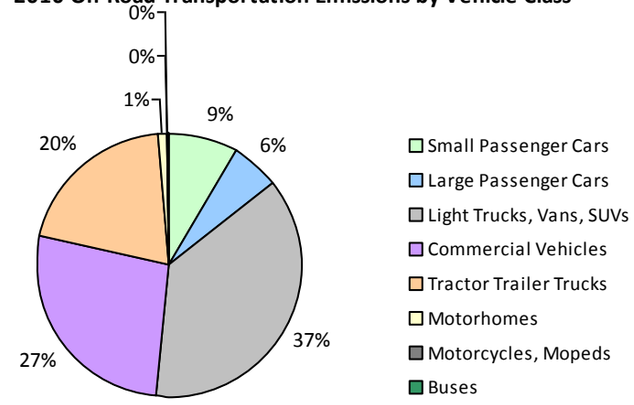
2010 Total Emissions by Fuel Type



2010 Building Emissions by Subsector



2010 On-Road Transportation Emissions by Vehicle Class



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Core Items

On-Road Transportation		2007					2010				
		Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)	Connections	Consumption	Avg VKT (km)	Energy (GJ)	C02e (t)
Small Passenger Cars	Gasoline	168	256,360 L	16,200	8,973	609	183	273,947 L	15,900	9,588	617
	Diesel Fuel			24,000	443	32			22,000	519	37
Large Passenger Cars	Hybrid								21,800	46	4
	Gasoline	110	221,651 L	17,700	7,758	526	106	199,800 L	16,600	6,993	450
	Diesel Fuel			11,100	178	12			10,600	129	9
Light Trucks, Vans, SUVs	Gasoline	469	1,148,661 L	16,600	40,203	2,754	485	1,146,547 L	16,100	40,129	2,608
	Diesel Fuel	31	74,873 L	13,400	2,868	204	28	74,520 L	15,400	2,853	198
	Other Fuel	11	20,935 L	11,000	530	32			12,500	218	13
Commercial Vehicles	Gasoline	67	197,487 L	17,300	6,911	464	86	237,227 L	16,200	8,303	531
	Diesel Fuel	123	487,824 L	21,900	18,685	1,312	141	592,461 L	23,400	22,692	1,546
	Other Fuel			12,800	120	8			10,200	96	6
Tractor Trailer Trucks	Diesel Fuel	26	748,140 L	61,700	28,653	2,013	24	597,341 L	52,700	22,878	1,560
Motorhomes	Gasoline			21,100	427	28			19,500	706	45
	Diesel Fuel			17,700	859	60			16,500	582	40
Motorcycles, Mopeds	Gasoline	12	2,895 L	5,200	100	7	12		5,700	0	0
Buses	Gasoline			15,800	97	7			17,200	204	13
Totals		**1,017**	**3,158,826 L**	**18,200**	**116,805**	**8,068**	**1,065**	**3,158,826 L**	**17,779**	**115,936**	**7,677**

Buildings		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Residential	Wood	N/A	24,115 GJ	24,115	489	N/A	22,480 GJ	22,480	455
	Heating Oil	N/A	1,925 GJ	1,925	136	N/A	1,795 GJ	1,795	123
	Propane	N/A	5,234 GJ	5,234	319	N/A	4,880 GJ	4,880	298
	Electricity	575	8,027,283 kWh	28,898	201	589	7,897,469 kWh	28,431	197
Commercial/Small-Medium Industrial	Electricity	165	8,714,517 kWh	31,372	218	178	8,606,073 kWh	30,982	215
Totals		**740**		**91,544**	**1,363**	**767**		**88,568**	**1,288**

Solid Waste		2007				2010			
		Connections	Consumption	Energy (GJ)	C02e (t)	Connections	Consumption	Energy (GJ)	C02e (t)
Community Solid Waste	Solid Waste	0	1,018 t	N/A	638	0	1,404 t	N/A	1,186
Totals		**0**			**638**	**0**			**1,186**

Totals for Transportation, Buildings and Solid Waste

Fuel Type	2007 (Population: 1,007)			2010 (Population: 1,062)		
	Consumption	Energy (GJ)	C02e (t)	Consumption	Energy (GJ)	C02e (t)
Hybrid	0 L	0		0 L	46	4
Gasoline	1,827,054 L	64,469	4,395	1,857,521 L	65,923	4,264
Diesel Fuel	1,310,837 L	51,686	3,633	1,264,322 L	49,653	3,390
Other Fuel	20,935 L	650	40	0 L	314	19
Wood	24,115 GJ	24,115	489	22,480 GJ	22,480	455
Heating Oil	1,925 GJ	1,925	136	1,795 GJ	1,795	123
Propane	5,234 GJ	5,234	319	4,880 GJ	4,880	298
Electricity	16,741,800 kWh	60,270	419	16,503,542 kWh	59,413	412
Solid Waste	1,018 t	0	638	1,404 t	0	1,186
Grand Totals		**208,349**	**10,069**		**204,504**	**10,151**

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Supporting Indicators

No new supporting indicator data have been provided in the 2010 reports. Work is currently underway to produce a complete second round of data for the indicators below in the 2012 reports (available in 2014). In the interim, we are including the same supporting indicator data that was provided in the 2007 reports. Feedback is requested on all supporting indicators; please contact us directly at

Housing Type - Private dwellings by structural type

Housing type is important for reducing building-related GHG emissions and energy consumption. A trend toward fewer single family dwellings indicates an increase in residential density, which is known to reduce transportation-related GHG emissions.

	1996		2001		2006	
	Units	%	Units	%	Units	%
Single Detached House	395	44	300	63	260	57
Semi-Detached House	0	0	5	1	5	1
Row House	0	0	0	0	0	0
Apartment, Duplex	20	2	10	2	5	1
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	35	4	35	7	30	7
Other Single Attached House	0	0	5	1	0	0
Movable Dwelling	45	5	120	25	155	34

Commute to Work - Employed labour force - by mode of commute

An increase in the number of people choosing to walk, cycle and use transit reduces GHG emissions. More compact, complete, connected communities should see an increase in the use of these transportation modes.

	1996		2001		2006	
	Units	%	Units	%	Units	%
Car, Truck, Van as Driver	325	67	375	67	325	60
Car, Truck,Van as Passenger	35	7	55	10	25	5
Public Transit	0	0	0	0	0	0
Walked	90	19	90	16	130	24
Bicycle	25	5	30	5	50	9
Motorcycle	0	0	0	0	10	2
Taxicab	0	0	0	0	0	0
Other Method	10	2	10	2	0	0

Parks and Protected Greenspace

Parks and protected greenspaces are important for the protection and enhancement of community carbon sinks.

	2009	
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	0	0
Local Parks	4	1
Agricultural Land Reserve	0	0
Other land use	487	99
Total Parks and Protected Area	4	1
Total Land Area	491	100

* Total is net of Indian Reserves
** Quantity of parkland may be underestimated

Residential Density

Increasing residential densities is known to reduce vehicle use resulting in fewer transportation-related GHG emissions. There are many additional benefits from more compact development.

	2009	
	Units	%
National Parks	0	0
Provincial Parks / Protected Areas	0	0
Local Parks	4	1
Agricultural Land Reserve	0	0
Other land use	487	99
Total Parks and Protected Area	4	1
Total Land Area	491	100

* Net of Crown land, parks, Indian Reserves, water features, airports, ALR,waste disposal site

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Supporting Indicators Under Consideration

Work is currently underway to produce a complete second round of supporting indicators for the 2012 reports (available in 2014). These reports will new data for the five supporting indicators included in the 2007 and 2010 Reports:

- **Housing Type**: Private dwellings by structural type
- **Commute to Work:** Employed labour force - by mode of commute
- **Commute Distance**
- **Residential Density**
- **Parks and Protected Greenspace**

And in addition, the 2012 reports we are working to be able to include:

- **Proximity to Transit**
- **Building Energy Intensity**
- **Building Floor Space**
- **Waste Diversion**

We are continuing to work towards reporting on even more supporting indicators in the future including:

- **Proximity to Services** (e.g destinations such as grocery store, school, other retail etc.)
- **Transit Ridership**
- **Water Use**
- **Impervious Surface Cover:** % change in impervious surface cover
- **Tree Canopy Cover**: % change in tree canopy cover
- **District Energy**: # and energy output (e.g. buildings connected, energy consumed in GJ or kWh) of district energy systems by energy type e.g. renewable or non-renewable)
- **On-Site Renewable Energy**: # and energy output (in GJ or kWh) from households producing and/or consuming on-site renewable heat (e.g. biomass, solar thermal, geo-exchange) and/or electrical (e.g. solar photovoltaic, small wind, small scale hydro) energy
- **Energy Recovery** from waste energy (GJ or kWh) recovered from waste (e.g. from landfill gas, sewage treatment, industrial operations, farm)

Please give us feedback by contacting us directly at CEEIRPT@gov.bc.ca

Many local governments have been undertaking a significant amount of climate action in both the corporate and community-wide spheres, as demonstrated in both the public reports from the Climate Action Revenue Incentive Program (CARIP) http://www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm, and on the http://toolkit.bc.ca website. These two resources may be helpful to those who are interested in learning from other BC local governments. The toolkit also contains additional information and resources including decision-support/planning frameworks and tools for undertaking actions to reduce GHG emissions and energy consumption.

This is your local government's 2010 Community Energy and Emissions Inventory (CEEI) Report

What is a CEEI Report?
CEEI Reports are a result of a multi-agency effort to provide a province-wide solution to assist local governments in BC to track and report on community-wide energy consumption and greenhouse gas (GHG) emissions as well as supporting indicators every two years. CEEI Reports are one of the many resources available through the Climate Action Toolkit (http://www.toolkit.bc.ca), a web-based service provided through the ongoing collaboration between UBCM and the Province.

Why does my local government need a CEEI Report?
A community energy and GHG emissions inventory can be a valuable tool that helps local governments plan and implement GHG and energy management strategies, while at the same time strengthening broader sustainability planning at the local level. CEEI reports fulfill local governments' Climate Action Charter commitment to measure and report their community's GHG emissions profile, establish a base year inventory for local governments to consider as they develop targets, policies, and actions related to BC's Local Government Act requirements, fulfill Milestone One requirements for those local government members of the Federation of Canadian Municipalities' (FCM's) Partners in Climate Protection (PCP) program, as well as supporting local government efforts to monitor progress towards Regional Growth Strategy objectives.

A first in North America!
CEEI is a first in North America and a first step for BC communities. The 2010 CEEI Reports are based on best available province-wide data. The accuracy and detail of CEEI reports will continue to improve to meet increasing local and provincial government information needs. Improvements have been made from the original draft 2007 CEEI Reports posted in Spring 2009. These include estimates for residential heating oil, propane and wood use, breaking out small from large industrial buildings, including updated land-use change and new agricultural sectors as 'memo items'. Following the 2010 CEEI Reports, inventories will be generated every two years, and will continue to improve as government information needs, international protocols and new data sources emerge.

For More Information
The full list of all BC local government 2010 CEEI Reports, User Guide, Technical Methods and Guidance Document, and additional information on the Supporting Indicators are available at: http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html For guidance on target setting and community actions, go to http://www.toolkit.bc.ca and http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm

We Need Your Feedback
To continue to guide us on CEEI, please take the time to contact us directly at CEEIRPT@gov.bc.ca

Notice to the Reader
This CEEI Report uses information from a variety of sources to estimate GHG emissions. While the methodologies, assumptions and data used are intended to provide reasonable estimates of greenhouse gas emissions, the information presented in this report may not be appropriate for all purposes. The Province of BC and the data providers do not provide any warranty to the user or guarantee the accuracy or reliability of the data contained in this report. The user accepts responsibility for the ultimate use of such data. We need your help to make these reports better,